

i-KRETE MD

Technical Data

Product Description

i-KRETE MD is a four component polyurethane self leveling system. The standard thickness for i-KRETE MD is a nominal 3-4 mm. Attractive smooth matt colored floor finish.

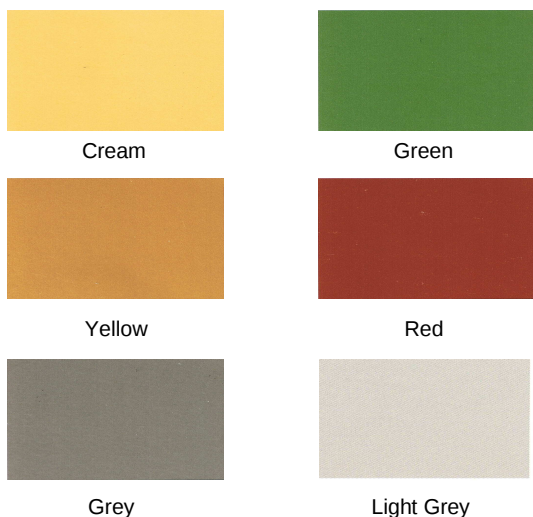
Uses

i-KRETE MD is formulated specifically for the food and beverage industry. To provide a good chemical resistance and hard wearing floor finish i-KRETE MD can be used as a protective overlay on new floor or to repair floor.

Benefits

- Impact resistance.
- Seamless & hygienic finish, no crevices where dirt and bacteria can dwell.
- Meets the requirements of JIS Z 2801 : 2000 for the Antimicrobial Activity
- Temperature resistant 0°C to 85°C
- Excellence chemical resistance
- Easy to clean, low maintenance requirement.
- High abrasion resistance
- Low odor during installation
- Smooth surface

Standard Color Chart



Color matching available with sufficient lead time and minimum order requirement.

Substrate

i-KRETE MD is suitable for application over concrete, wood, tile or metal. Not recommended on asphalt or painted surface.

System Options

Cove Base

To provide for an integral seal at the joint between the floor and wall. Coving can be formed with i-KRETE Coving Mortar in conjunction with i-FLOOR Primer.

Packaging

i-KRETE MD is packaged in 20 kgs./set, consist of: Part A and Part B
Part C1 and Part C2 (Easily identifiable Pigment Pack)

Storage & Coverage

Each set of i-KRETE MD will cover approximately as follow:

- 3.35 sq.m. for thickness 3 mm.
- 2.61 sq.m. for thickness 4 mm.

Substrate preparation

Proper preparation is critical to ensure an adequate bond. The substrate must be dry and free of grease, fats, oil and laitance. Totally enclosed shot blasting or scarification. The surface must be show open textured surface like a sand paper texture.

Priming

i-FLOOR Primer is necessary for applications of i-KRETE MD over all substrates. The primer system must be cure to a tack-free state before applying i-KRETE MD

Mixing

- Add Part B and Part C2 (Pigment Pack) into mixing pail. Mixing with the blender for 30 seconds.
- Add Part A mixing with blender for 30 seconds and Part C1 into mixing pail. Allow the contents to mix until aggregate is thoroughly "wet out" for 30 seconds.

Pot life

i-KRETE MD has working time of approximately 10-15 minutes at 30°C. The working time will vary depending on temperature.

Application

- Material must be use immediately after mixing.
- Use screed rake to distribute the mixed onto the floor.
- Use V-notched hand trowel pull the trowel through the material at right angles to the floor.
- Use a spiked roller to roll the material for allows air to escape and for the aggregate to be pushed down allowing liquids to come to surface.

Hardening Time

At 30°C allow:

- 12 hours for foot traffic.
- 24 hours for common industrial spillages and heavy traffic.
- 5 days for fully chemical cure.

Colour Stability

i-KRETE MD is not colour fast and may change colour over time (exhibits a yellowing effect). Colour change depends on the UV light and heat levels present and hence the rate of change cannot be predicted. This is more noticeable in light colours and blues but does not compromise the product's chemical resistance or physical characteristics. Consult our Technical Department for UV light stable specification.

Shelf Life

Store unopened in dry conditions at 25-35°C. Avoid excessive heat and do not freeze. The shelf life is 12 months in original, unopened container.

Cleaning up

Clean up mixing and application equipment immediately after use. Use toluene or xylene. Observe all fire and health precautions when handling or storing solvent.

Important

If any unusually long delay should arise, such as a break for lunch, it will be necessary to completely clean all mixing paddles and pails before ceasing operation. This is extremely important. Doing this will prevent the later contamination of the new batches of i-KRETE MD with particles of partially cured material when the mixing operation starts up again after the break. The presence of such particles would seriously affect the troweling and finishing of the floor.

Caution

Avoid contact with Part A and B as they may cause skin and/or eye irritation. In case of contact, immediately flush area with copious amounts of clean water for at least 15 minutes. Seek medical attention. Applicators should cover hands with impervious gloves. Wash hands thoroughly with soap and water after use, and before eating, smoking, etc.

Physical/chemical characteristics

Compressive Strength 60 N/mm² after 7 days
(ASTM C-579)

Tensile Strength 15 N/mm²
(ASTM C-307)

Flexural Strength 20 N/mm²
(ASTM C-580)

Hardness 80-84
(ASTM C-2240/Shore D Durometer)

Abrasion Resistance 30mg loss per
(ASTM D4060 Taber Abrader) 1000 cycles (1
kg load using
H22 wheels

Coefficient of Thermal Expansion $\alpha \gg 2.7 \times 10^{-5}$ per °C
(ASTM E 381, ASTM D-696, ISO 11359)
(temperature range: -20.C to +60 OC)

Bond strength > 2.5 MPa
(ASTM C-4541) (100% concrete failure)

Impact resistance >140 in./lbs.
(ASTM C-4226)

Water absorption 0%
(ASTM C-413)

Slip Resistance Dry 70 Wet 25
Pendulum Slip Test

Temperature Resistance:

- 3 mm. -0°C to 85°C
- 4 mm. -0°C to 85°C